INFORMATION ANALYSIS DIRECTORATE

Prevalence of Autism (including Asperger Syndrome) in School Age Children in Northern Ireland

Annual Report 2020

Department of Health
www.health-ni.gov.uk

NISRA

Published 21 May 2020

Reader Information

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Publication Date	21 May 2020
Issued by	Community Information Branch Information & Analysis Directorate Department of Health Stormont Estate Belfast, BT4 3SQ, Northern Ireland Tel (028) 90522580 Email cib@health-ni.gov.uk https://www.health-ni.gov.uk/topics/doh-statistics-and-research
Target Audience	Social Services Directors, Directors of Children's Services, Chief Executives of HSC Board and Trusts in Northern Ireland, health care professionals, academics and social care stakeholders.
Purpose	Data from this publication is used to: • Monitor the delivery of social care services to children; • Aid the assessment of Health and Social Care (HSC) Trust performance; • Corporate monitoring; • Inform and monitor related policy; • Respond to parliamentary/assembly questions. The bulletin is also used by academics/ researchers, the voluntary sector, and those with an interest in the Autism Strategy and Action Plan.
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Price	FREE

We gratefully acknowledge the assistance of colleagues working within the Department of Education, Demographic Statistics Branch (NISRA) and Public Health Information and Research Branch (Department of Health) in producing this publication.

Statistics and research for the **Department of Health** is provided by the Information and Analysis Directorate (IAD). IAD is responsible for compiling, processing, analysing, interpreting and disseminating a wide range of statistics covering health and social care.

The statisticians within IAD are out posted from the Northern Ireland Statistics & Research Agency (NISRA) and the statistics are produced in accordance with the principles and protocols set out in the Code of Practice for Official Statistics.

IAD comprises four statistical sections: Hospital Information, Community Information, Public Health Information & Research and Project Support Analysis.

This report is produced by Community Information Branch.

About the Community Information Branch

The purpose of Community Information Branch (CIB) is to promote effective decision making in children and adult social services and community health by providing quality information and analysis.

We collect, analyse and publish a wide range of community information that is used to help monitor the delivery of personal social services policy. Information collected by CIB is used to assess HSC Trust performance, for corporate monitoring, policy evaluation, and to respond to parliamentary/assembly questions.

Information is widely disseminated through a number of regular key statistical publications and ad hoc reports, details of which are available online.
https://www.health-ni.gov.uk/topics/doh-statistics-and-research

Our Vision and Values

- *Provide up-to-date, quality information on children and adult social services and community health;*
- *To disseminate findings widely with a view to stimulating debate, promoting effective decision-making and improvement in service provision; and*
- *Be an expert voice on health and social care information.*

Contents

Background

Autism Spectrum Conditions

Autism is a developmental disability that influences a person's ability to communicate and relate to other people, as well as affecting how they make sense of the world. It is a spectrum condition, meaning that while all people with autism will have similar problems, overall their condition will impact them in different ways. Some people may be able to lead independent lives while others will require a lifetime of specialist support.

Asperger Syndrome is a similar condition to autism; however these children do not generally experience the same language and learning disabilities associated with autism. They are more likely to have difficulties in the areas of social imagination, communication and interaction.

The need to develop and improve health and social care services for people of all ages who are affected by autism (including Asperger Syndrome) has been apparent for some time. In order to provide effective services, knowing the incidence and prevalence of this condition is clearly important. This report aims to show the prevalence of autism amongst children of compulsory school age (4–15 year olds at the start of the school year).

Prevalence and reporting of Autism in Northern Ireland

The introduction of the Autism Act (Northern Ireland) 2011, and the accompanying increase in awareness via campaigns and events, may well have contributed to a rise in the number of assessments carried out and positive diagnoses processing through the system.

The Health and Social Care Board have since 2014 had a routine monitoring process in place which identifies those children who have undergone an assessment for autism and those who have received a positive diagnosis.

These figures are reported quarterly by the Department and can be found at the following link: https://www.health-ni.gov.uk/articles/autism-statistics.

Changes to the data collection

The information presented in this bulletin derives from the 'Northern Ireland School Census' collected by the Department of Education (NI). From 2019/20, the figures used to identify pupils with a diagnosis of autism are taken from the new electronic Medical register.

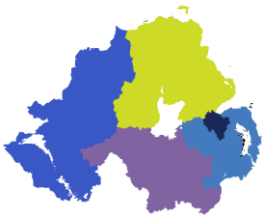
Historically, children with autism were recorded within the special educational needs (SEN) register. A review was undertaken by DE and The Education Authority to review current SEN categories and school guidance for recording children with SEN. The review highlighted a number of medical diagnosis anomalies where pupils with a medical diagnosis but no special educational needs were incorrectly categorised as having a SEN. This has been corrected with the creation of a medical register. All pupils with autism will have a medical diagnosis but not all will require assistance with their learning. From 2019/20 onwards, pupils with a diagnosis of autism should be recorded on the new electronic Medical register and consideration given to ascertain if a particular SEN is applicable. Only those who require special educational provision should be recorded on the SEN register. This change gives a more accurate recording of pupils with autism as well as the special support they need in the school.

Because of this change in recording, figures from 2019/20 are not directly comparable with previous years. To illustrate this, in graphs that include previous years data, a red line has been added to distinguish between figures before and after 2019/20.

For the purposes of this report, children previously identified as having Asperger Syndrome were included in all calculations of autism prevalence. Going forward, all HSC Trusts will use the ICD10 diagnosis coding, which once complete will no longer diagnose Asperger Syndrome separately from autism.

Key Findings

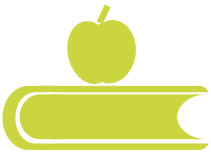
2019/20



Prevalence rate of autism for school aged children in Northern Ireland[1] **4.2%**

Prevalence rate of autism in **females** **2.0%**

Prevalence rate of autism in **males** **6.4%**



Proportion of children with autism who had **no special educational needs** **14%**

Prevalence of autism was 37% higher in the **most deprived** decile compared to the Northern Ireland average **37%**

1 – Refers to all children of compulsory school age (4 – 15 years old).

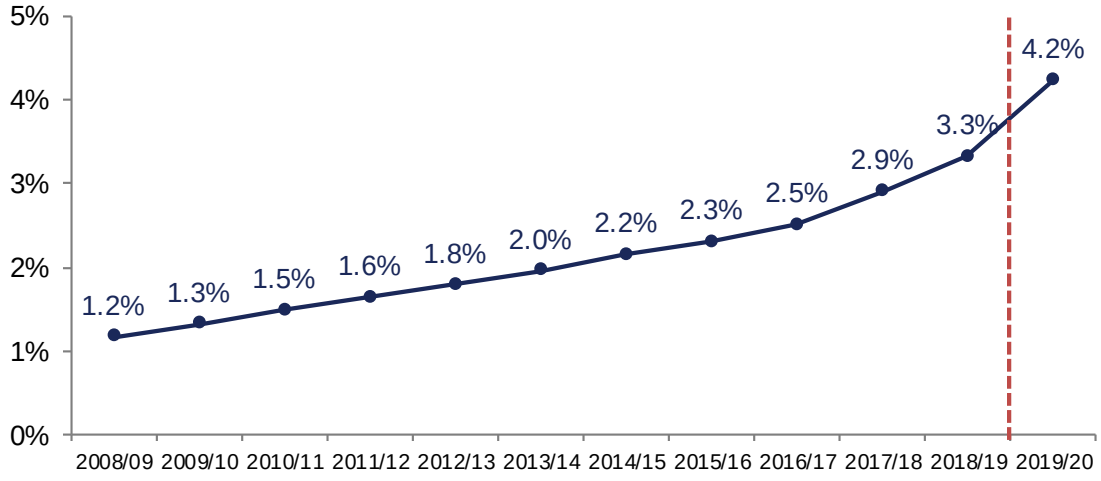
Overall Prevalence

Figures extracted from the 2019/20 Northern Ireland School Census show that **12,544 school aged children had been diagnosed with autism**. This represents an estimated **autism prevalence rate 4.2%within the school aged population**.

The continued high number of new diagnosis of children with autism[2], recorded by the Health and Social Care Trusts for the year leading up to the date of the School Census, would suggest an increase in the school prevalence rate. This would contribute to explaining the considerable jump in the 2019/20 prevalence rate from the previous year. However, due to a change in the way the school census collect autism data[3], the 2019/20 figure is not directly comparable to previous years. Therefore, the increase may indicate that the previous methodology underestimated the number of children with autism and that the jump in the figure is partly due to methodology, not solely an increase in prevalence.

The historic annual increase in prevalence of children with autism since 2008/09 has been observed against a background of a relatively static school population. Please see Appendix C for further details.

Autism Prevalence in School Aged Children (2008/09 – 2019/20)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

- - - Please note that due to a change in the data collection, the years up to and including 2018/19 are not directly comparable with 2019/20.

2 – Quarterly Autism Statistics, https://www.health-ni.gov.uk/articles/autism-statistics.

3 – Please see Appendix A.

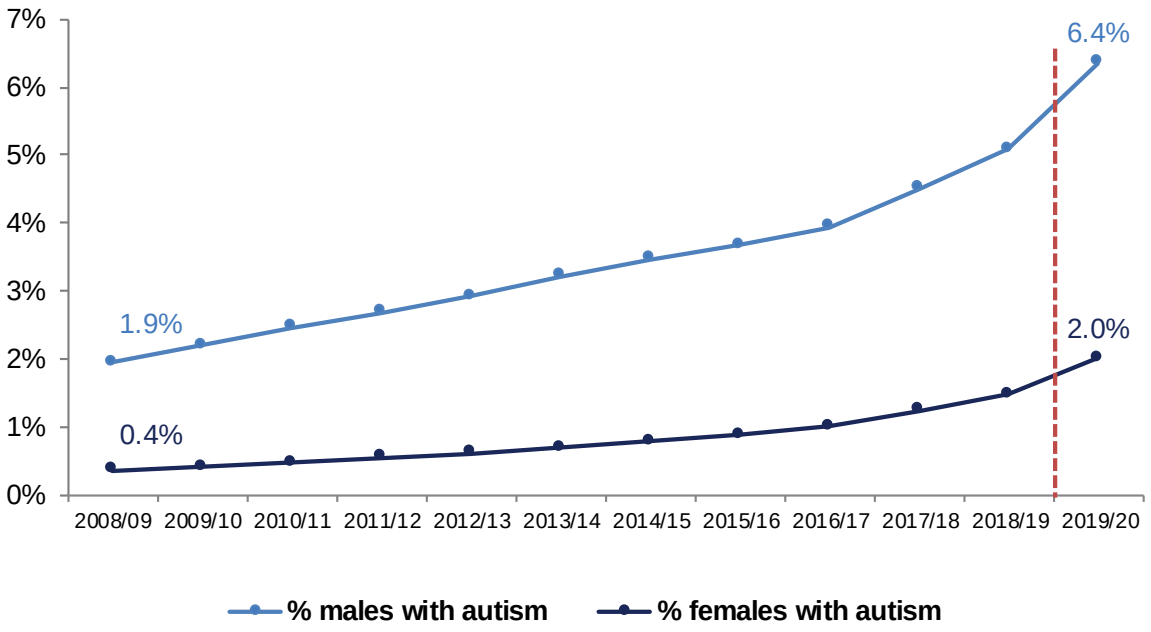
Gender

***Males** were **3 times more likely** to have a diagnosis of autism than females.*

In the information derived from the 2019/20 NI School Census, **6.4% of males were identified with autism** compared with **2.0% of females**. This ratio is similar to that reported by the National Autistic Society (NAS) who have stated the most recent estimate for male-to-female autism ratio is nearer to 3:1 [4].

The 2019/20 figures are not directly comparable to previous years; however the prevalence rate had, between 2008/09 and 2018/19, been consistently higher for males than females. Furthermore, it had increased for both males and females with the gender gap inflating over the years.

Autism Prevalence by Gender (2008/09 – 2019/20)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

- - - Please note that due to a change in the data collection, the years up to and including 2018/19 are not directly comparable with 2019/20.

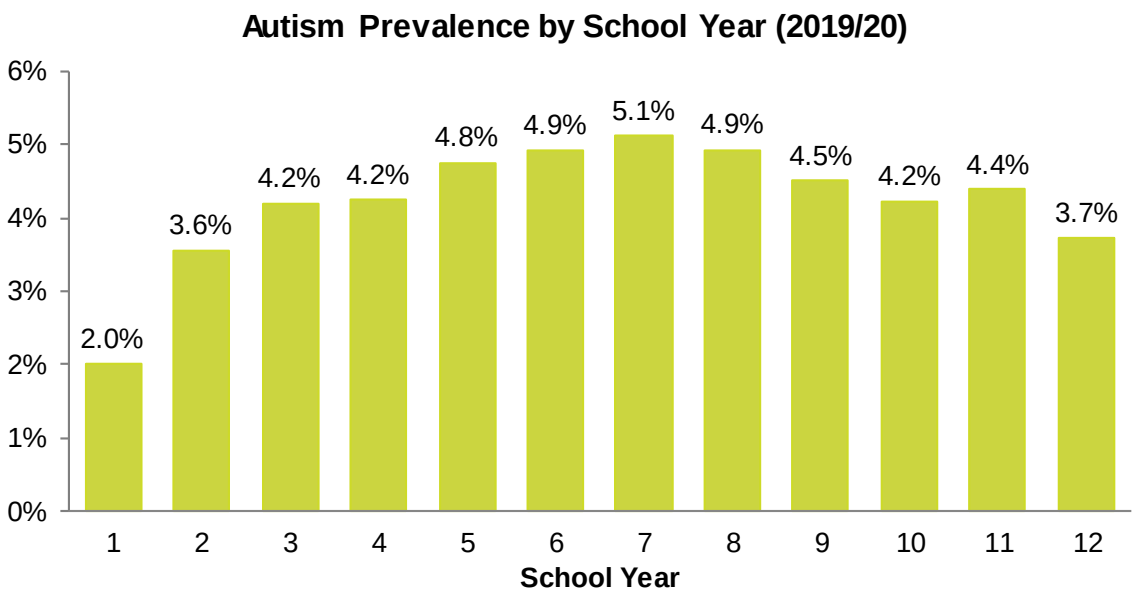
4 – National Autistic Society, https://www.autism.org.uk/about/what-is/gender.aspx.

School Year

5.1% *of children in **Primary 7** had an **autism diagnosis**.*

In 2019/20, the highest prevalence rate recorded was 5.1% for those in Primary 7 (children aged 10/11), and the lowest was 2.0% for those in Primary 1 (children aged 4/5).

Generally there is a steady rise in the prevalence rate of autism from Primary 1 up to Primary 7 (4-11 year olds) in 2019/20.



Source: Northern Ireland School Census

Note: Figures include all pupils in primary (including nursery, reception and Primary 1-7 classes), post primary and special schools.

Special Educational Needs Stage

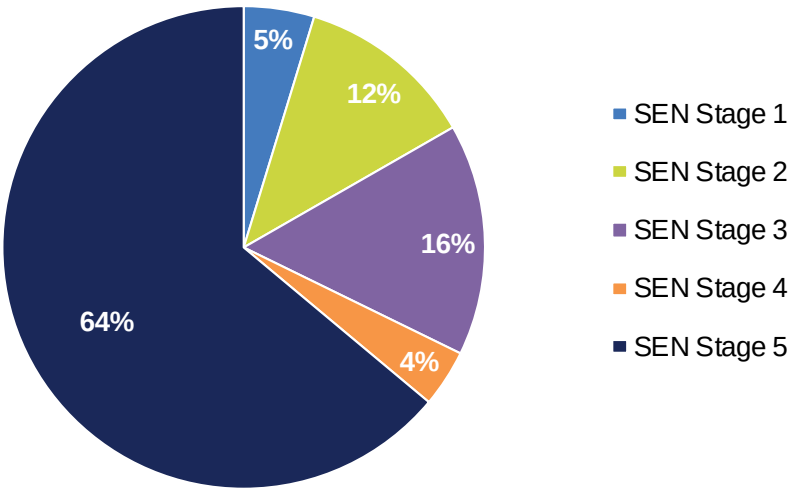
14% *of children with autism did not have any Special Educational Needs*

The Code of Practice on the Identification and Assessment of Special Educational Needs (SEN) implements a 5 stage approach to the identification of children with learning difficulties, the assessment of their educational need and the making of any special educational provision necessary to meet those needs[5]. Stages 1-3 are completed by the school, while stages 4 and 5 are of shared responsibility with the school and Education Authority. Children are reviewed on a yearly basis and may move up or down the assessment scale, depending on performance[6].

Of all children diagnosed with autism in 2019/20, 14% were not identified as having any special educational needs[7].

Of those identified with Special Educational Needs, over three-fifths (64%) were at SEN Stage 5. Please note that, as the SEN process is dynamic, with children moving between stages, the SEN stages must be treated as a 'snapshot' at the time of the NI School Census.

Children diagnosed with autism and Special Educational Needs (SEN), by SEN stage (2019/20)



Source: Northern Ireland School Census

Note: Figures include all pupils in primary (including nursery, reception and Primary 1-7 classes), post primary and special schools.

5 - https://www.education-ni.gov.uk/articles/special-educational-needs-code-practice.

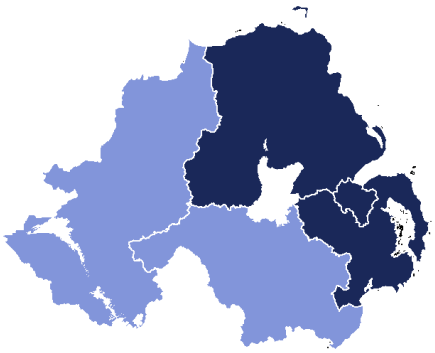
6 - The stages of the SEN process are detailed in Appendix B.

7 – The number of children with autism who do not require a Statement of Educational Need is part of the new data recording by the Department of Education, and has not been possible in previous years.

Health and Social Care Trust

During 2019/20, the **highest autism prevalence rate was observed in the Belfast HSC Trust, at 6.9%**, and the **lowest in the Southern HSC Trust, at 1.8%**. The Belfast, Northern, and South Eastern HSC Trusts had a prevalence rate higher than the Northern Ireland average of 4.2%. The Western, and Southern HSC Trusts were below this average.

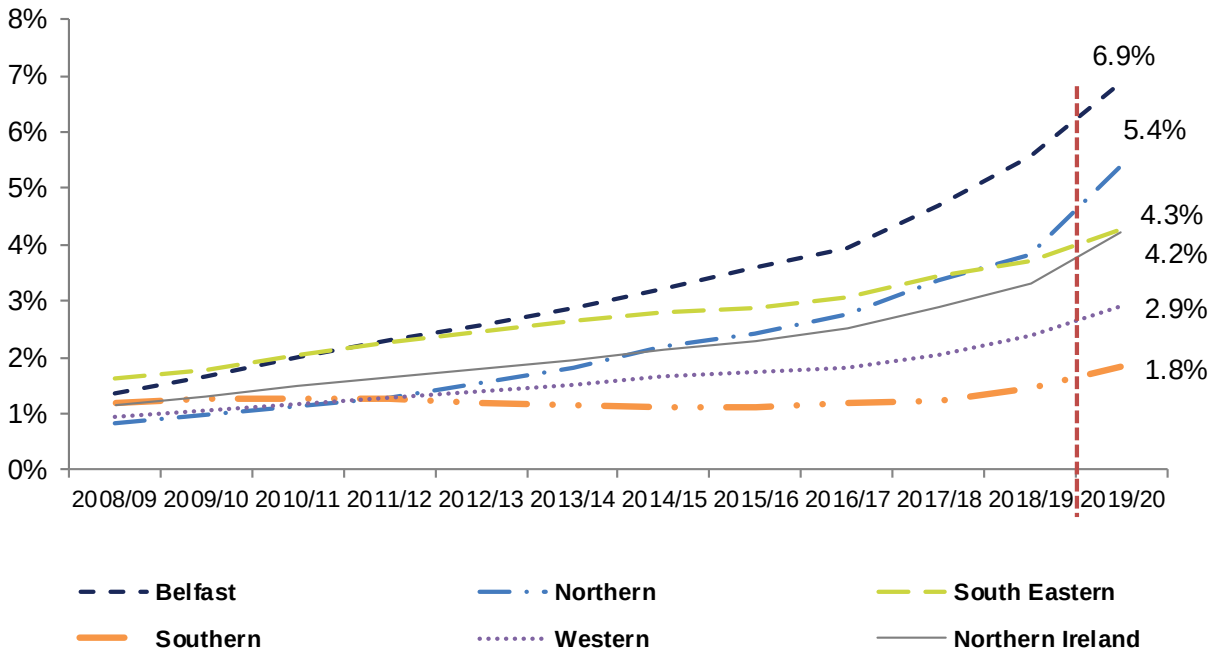
A review of the data over the previous years also shows the autism prevalence rate in the Belfast, Northern and South Eastern HSC Trusts has been consistently higher than the Northern Ireland average. Generally, over the previous 12 years, the autism prevalence rate has steadily increased across the Trusts, with a larger increase observed in the most recent 3 years[8].



HSC Trusts with an autism prevalence rate above the NI average (4.2%)

HSC Trusts with an autism prevalence rate below the NI average (4.2%)

Autism Prevalence by HSC Trust (2008/09 – 2019/20)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

- - - Please note that due to a change in the data collection, the years up to and including 2018/19 are not directly comparable with 2019/20.

8 – The Southern HSC Trust has consistently had the lowest prevalence rate between 2008/09 and 2018/19.

Urban/Rural Location

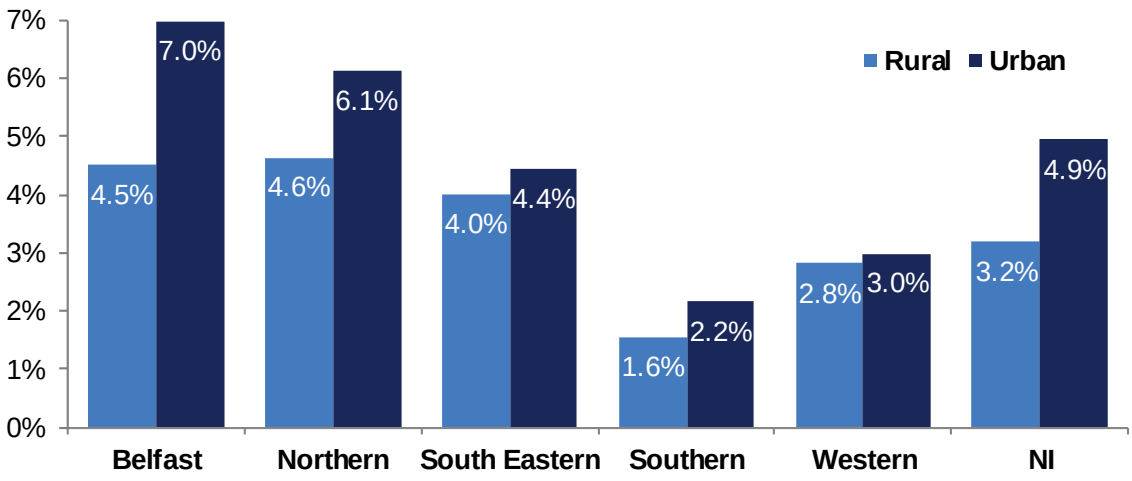
4.9% *of children in urban areas have been diagnosed with autism.*

The autism prevalence rate was higher in the urban population than in the rural population with a difference of 1.8 percentage points 2019/20. The difference in **the proportion of children identified with autism in urban and rural areas at a regional level was statistically significant**. This means that it is unlikely that the difference has occurred by chance alone.

In 2019/20, the HSC Trust with the largest difference in autism prevalence rates between the urban and rural populations was the Belfast HSC Trust. It should be noted that this HSC Trust has the highest overall prevalence rate and is almost exclusively urban which has a significant impact upon the Northern Ireland figure. Generally, in the other HSC Trusts, there was a more even split between the autism prevalence rate in the urban and rural populations; however this gap does appear to be widening in the Northern HSC Trust.

The difference in prevalence rate between urban and rural areas was statistically significant during 2019/20 for all but the Western HSC Trust[9].

Autism Prevalence by Location and HSC Trust (2019/20)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

Note: The Belfast HSC Trust has a very small proportion of rural areas and therefore this figure should be treated with caution.

9 – Appendix D shows the statistical significance trends for each HSC Trust.

Multiple Deprivation Measure

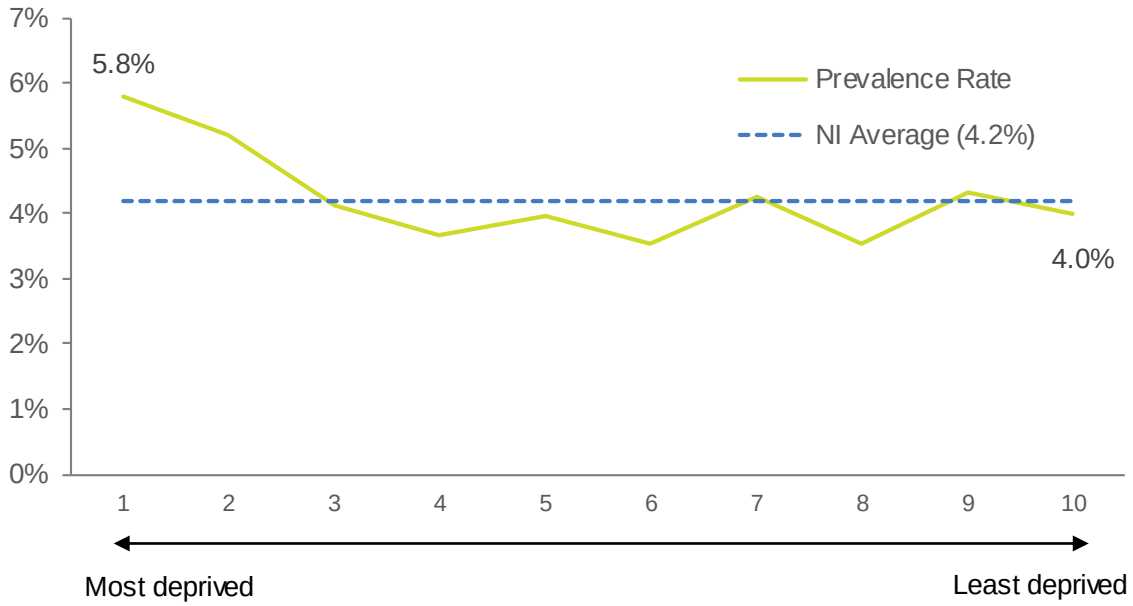
14% *of **children identified with autism** were living in the **most deprived decile** of Northern Ireland.*

During 2019/20, **14% of children identified with autism were from the most deprived Multiple Deprivation Measure (MDM) decile in Northern Ireland**[10], while 8% of children identified with autism were located in the least deprived decile of the country[11].

A statistical significance relationship has been found between **the proportion of children identified with autism and MDM Decile.** This means that it is unlikely that the difference has occurred by chance alone.

The autism prevalence rate was higher than the Northern Ireland average for the two most deprived deciles, whereas all other deciles were either similar to or below the regional average.

Autism Prevalence by MDM Decile (2019/20)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

10 – Information on the Northern Ireland Multiple Deprivation Measure can be found here.

11 – Maps showing the most and least deprived deciles of Northern Ireland can be found in Appendix E.

Inequality Gap

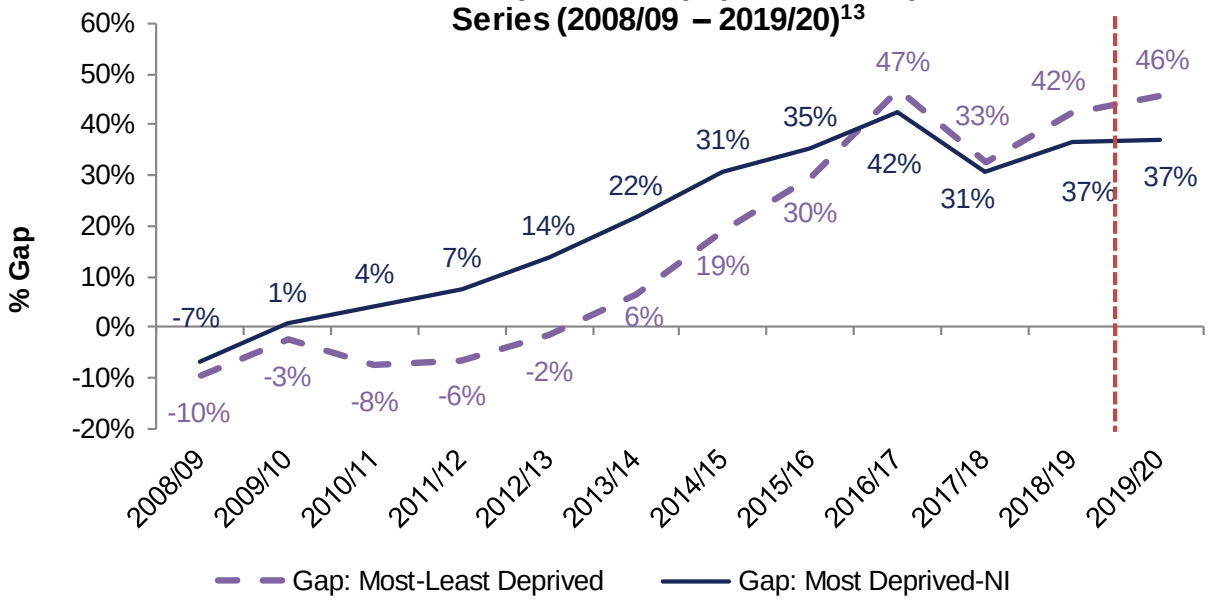
37% *of **children identified with autism** were living in the **most deprived decile** of Northern Ireland.*

The following analysis of the autism inequality gap was carried out through the NI Health & Social Care Inequalities Monitoring System (HSCIMS)[12] within Department of Health NI which provides in-depth assessment of inequality gaps across a range of health and social care indicators.

The simple gap analysis shows that the rate of autism in school aged children in the 10% most deprived areas in Northern Ireland stood at 5,806 cases per 100,000 population in 2019/20. This was almost two-fifths (37%) higher than the regional average, 4,237 cases per 100,000 population, and almost one and a half times the rate in the 10% least deprived areas (3,986 cases per 100,000 population).

In the years prior to 2013/14, rates were slightly higher in the least deprived areas than in the most deprived areas; however, since then the rate of autism amongst children in the most deprived areas has increased at a faster rate. This has resulted in higher rates of autism observed in the most deprived areas, and a widening of the deprivation inequality gap.

Children with autism per 10,000 population: Deprivation Time Series (2008/09 – 2019/20)[13]



Source: Northern Ireland School Census

Note: Figures for 2018/19 have been amended since the previous publication.

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

- - - Please note that due to a change in the data collection, the years up to and including 2018/19 are not directly comparable with 2019/20.

12 – https://www.health-ni.gov.uk/topics/dhssps-statistics-and-research/health-inequalities-statistics.

13 – Further analysis using the Slope Index of Inequality (Sii) and the Relative Slope of Index (Rii) can be found in Appendix F.

Appendix A – Technical Notes

Data Collection

The information presented in this bulletin derives from the 'Northern Ireland School Census' collected by the Department of Education (NI). All pupils on the rolls of grant-aided primary, post-primary and special schools were included in this return comprising each child who was a registered pupil in a school in October of each given year and who attended for at least one day.

The Census collects a large amount of information including demographic data, free school meal entitlement, looked after children numbers, newcomer children numbers and assessment data. This includes disability and a breakdown of those children identified with autism.

The data extracted from the 'Northern Ireland School Census' for use in this publication includes the number of children identified with autism (including Asperger's Syndrome) by gender, school year, Health and Social Care (HSC) Trust, multiple deprivation measure and urban/rural split,.

Changes to data collection

Historically, children with autism were recorded within the special educational needs (SEN) register. However, from 2019/20, the SEN register only refers to those that require assistance with their learning.

Pupils with a diagnosis of autism will now be recorded on the new electronic Medical register[14]. All pupils with autism will have a medical diagnosis but not all will require assistance with their learning. Only those who require special educational provision should be recorded on the SEN register.

Because of this change in recording, figures from 2019/20 are not directly comparable with previous years. To illustrate this, in graphs that include previous years data, a red line has been added to distinguish between figures before and after 2019/20.

Data Quality

There are a number of limitations to the data in this study and its use in establishing prevalence figures for autism.

Data is sourced from the school census which is not a diagnostic source. This is presently the most comprehensive data source available, it only covers those children of school age attending school. Information would suggest that there were approximately an additional 230 home taught children known to the education authority with no further details available.

The data only captures those children identified with autism, at any time there may be additional children who may be progressing through the full assessment process and it is possible that a number of children may be identified as having autism at a later date.

It should also be noted that there are many factors which can lead to variances in the apparent prevalence rates within the different breakdowns commented on in this bulletin, not least the assumption that there is consistency of approach in the care pathways as managed by the different HSC Trusts. In this regard, care should be taken when considering the findings, i.e. it is likely that at least some of the observed variation in prevalence may be attributable to differences in organisational structure and arrangements in place between/within HSC Trust areas.

14 – https://www.education-ni.gov.uk/publications/sen-and-medical-categories-guidance-schools.

Rounding Conventions

Percentages have been rounded and as a consequence some percentages may not sum to 100. A figure of 0% may reflect rounding down of values under 0.5%.

Revisions Policy

This data is revised by exception. If this occurs the circumstances of the revision are reported on our website and the dates figures are revised are noted both on the website and within the publication. The full revisions policy for statistics published by Information and Analysis Directorate is published on the Department's website.

Main Uses of Data

Data from this bulletin meets the information requirements of a wide range of internal and external users. It is used to monitor the delivery of social care services to children, to help assess HSC Trust performance, corporate monitoring, to inform and monitor related policy, and to respond to parliamentary/assembly questions. The bulletin is also used by academics/researchers, the voluntary sector and those with an interest in autism.

Related Publications

Data is published on the Department of Health website each quarter on the number of children referred for an assessment for autism and the number of children diagnosed with autism. Figures are provided for Northern Ireland and each HSC Trust area. This data can be found at the following link: https://www.health-ni.gov.uk/articles/autism-statistics .

User Engagement

If you have any comments on this publication please contact:
Jessica McCluney
Jessica.McCluney@health-ni.gov.uk
Tel: 028 9052 2579

Next Release

The next release of these statistics is scheduled for May 2021. The publication release dates for statistical bulletins produced by Community Information Branch are available from the Department's website at: https://www.health-ni.gov.uk/publications/statistical-releases-calendar .

Appendix B – Definitions

Asperger Syndrome
Asperger Syndrome is similar to autism; however people with this condition do not generally experience the same language and learning disabilities associated with autism. They are more likely to have difficulties in the areas of social imagination, social communication and social interaction.

Autism
Autism is a lifelong developmental disability that affects how a person communicates with and relates to other people and how they experience the world around them. Autism is often described as a 'spectrum disorder' because the condition affects people in many different ways and to varying degrees.

Autism Act (Northern Ireland) 2011
The Autism Act (Northern Ireland) 2011 required the Department of Health, Social Services and Public Safety to lead on the development; implementation; monitoring and reporting of a cross-departmental Autism Strategy. The Autism Strategy (2013 – 2020) and Action Plan (2013 – 2016) was subsequently approved by the Northern Ireland Executive and launched in January 2014.

Inequalities[15]
Statistical techniques such as the slope index of inequality and the relative index of inequality have been used to analyse socioeconomic inequalities between children identified with autism. More information on these can be found in appendix F.

Prevalence
In order to establish the prevalence of autism within the compulsory school age population, the number of children who were attending school and had been identified with autism was divided by the total number of compulsory school age children attending school. This gave the proportion of children within the cohort who were identified with autism.

School Age
Children aged 4 – 15 years at the start of the school year are of compulsory school age.

Special Educational Needs (SEN) Assessment Stages
Stage One: Teachers identify and register a child's special educational needs and, working with the schools special educational needs (SEN) co-ordinator, take initial action.
Stage Two: The (SEN) co-ordinator leads in collecting and recording information and for co-ordinating the child's special educational provision.
Stage Three: Teachers and the SEN co-ordinator are supported by specialists from outside school.
Stage Four: The Education Authority considers the need for a statutory assessment and may make a multi-disciplinary assessment.
Stage Five: The Education Authority consider the need for a statement of special educational needs; if necessary it makes a statement and arranges, monitors and reviews provision.

Statistical Significance
In order to test whether or not the relationship between two variables was statistically significant we used the chi-square test.

15 – This method was used to analyse ASD figures against the Multiple Deprivation Measure.

Appendix C – Number of children identified with autism

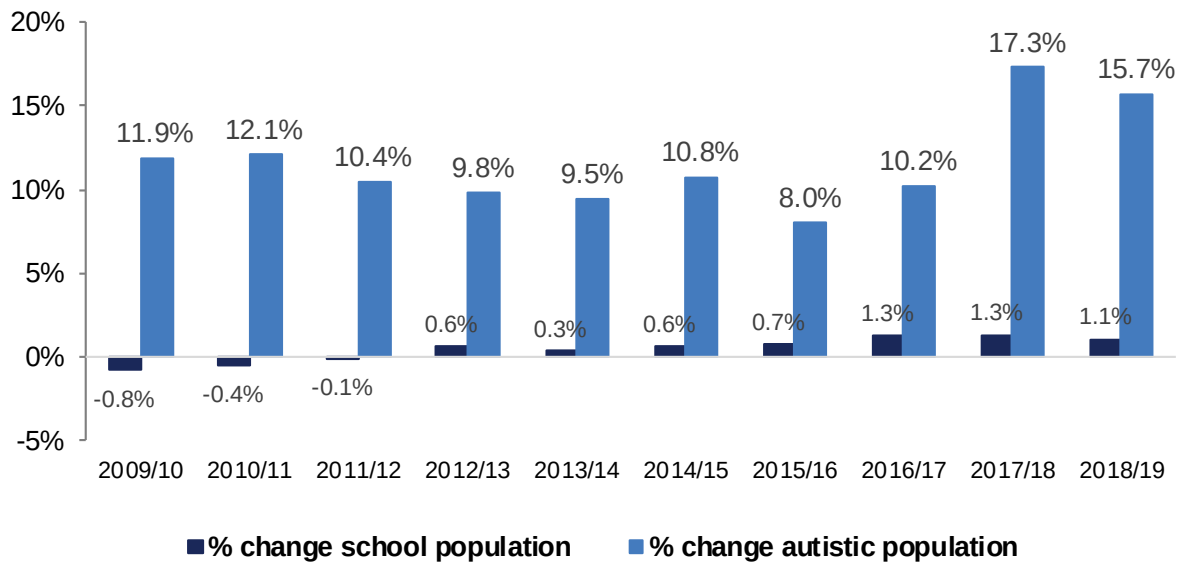
Number of children identified with autism in Primary 1 – Year 12

HSC Trust	Number of children with autism in 2019/20
Belfast	3,554
Northern	3,956
South Eastern	2,384
Southern	1,209
Western	1,428
Unknown	13
Northern Ireland	*12,544*

Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.
Note: Figures for years prior to 2019/20 can be found in previous publications, https://www.health-ni.gov.uk/articles/autism-statistics.

Annual percentage change in school and autistic populations (2009/10 – 2018/19)



Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.
Note: The percentage change in the autism population between 2018/19 and 2019/20 is not shown as it may be influenced by new recording methodology.

Appendix D – Statistical Significance Trends: Urban/Rural autism

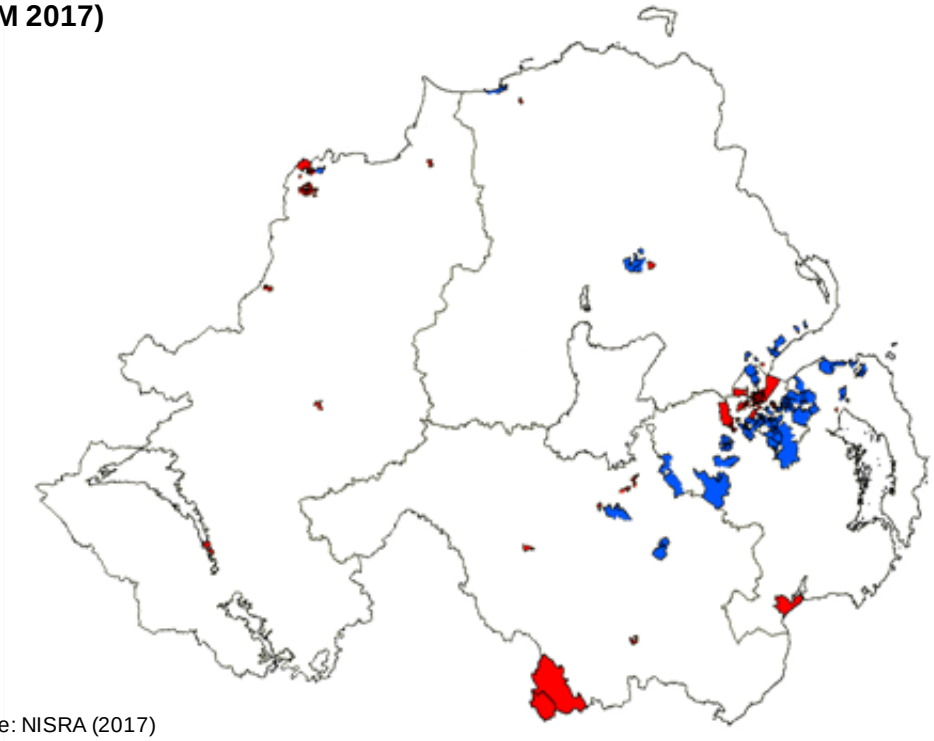
Year	HSC Trust					Northern Ireland
	Belfast	Northern	South Eastern	Southern	Western	
2009/10	No	No	No	Yes	Yes	Yes
2010/11	No	No	No	Yes	No	Yes
2011/12	No	No	No	Yes	No	Yes
2012/13	No	Yes	No	Yes	No	Yes
2013/14	No	Yes	No	Yes	No	Yes
2014/15	No	Yes	No	Yes	No	Yes
2015/16	No	Yes	Yes	Yes	No	Yes
2016/17	No	Yes	Yes	No	Yes	Yes
2017/18	Yes	Yes	Yes	Yes	No	Yes
2018/19	Yes	Yes	Yes	Yes	No	Yes
2019/20	Yes	Yes	Yes	Yes	No	Yes

Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

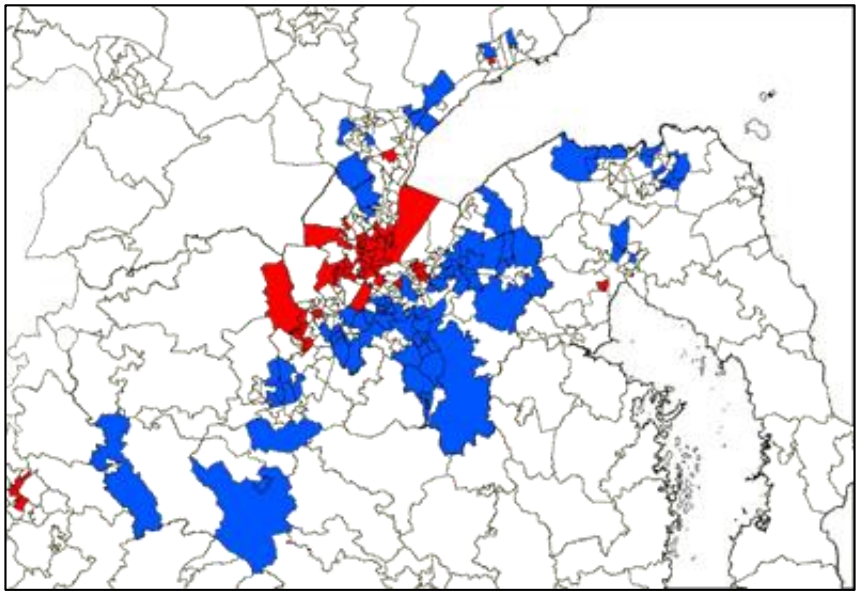
Appendix E – Deprivation Maps

Map One: The Most (Red) and Least (Blue) Deprived Areas in Northern Ireland (MDM 2017)



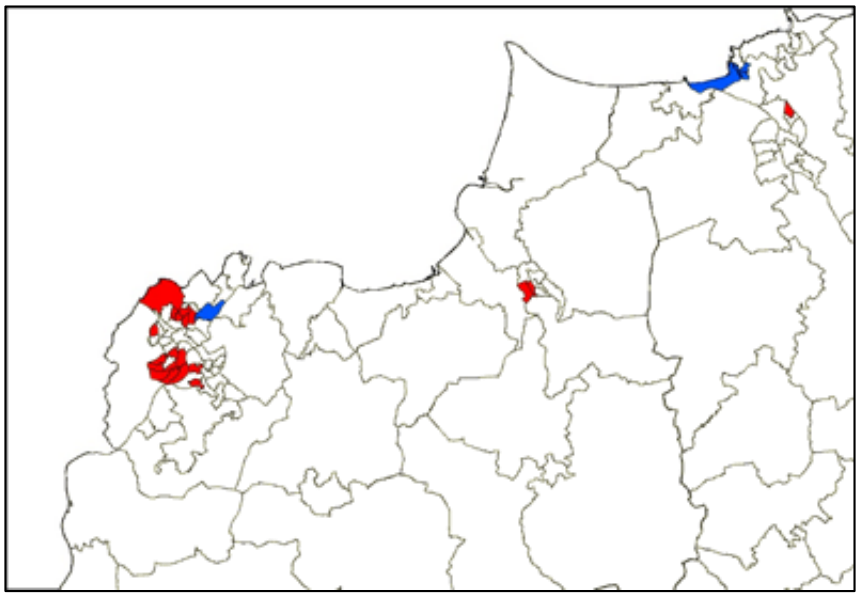
Source: NISRA (2017)

Map Two: The Most (Red) and Least (Blue) Deprived Areas in the Belfast Metropolitan Urban Area



Source: NISRA (2017)

Map Three: The Most (Red) and Least (Blue) Deprived Areas in the Derry Urban Area



Source: NISRA (2017)

Appendix F – Further Information

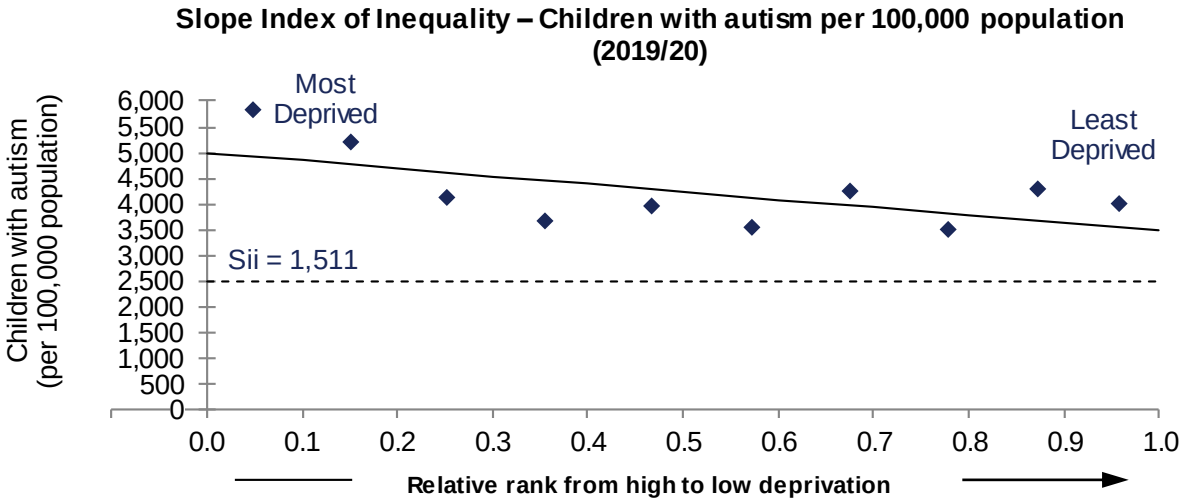
Social Gradient

In addition to the simple deprivation gap analysis presented in this publication, the following social gradient analysis has been undertaken to provide a fuller assessment of inequalities across all socio-economic groups in Northern Ireland. Health and social care inequalities are often considered in terms of the gap between the most and least deprived quintiles/deciles of the population. Despite this, it does not account for those areas of intermediate levels of deprivation that may also be relatively disadvantaged in terms of their health status. This is reflected in the Marmot Review[16] which demonstrated that there is a social gradient in health, and its wider determinants that run from top to bottom of the socioeconomic spectrum, meaning that health inequalities affect everyone.

Absolute gap (most-least deprived gap): This measure describes the absolute difference between the extremes of deprivation. It has the advantage that it is intuitive and straightforward to explain; however it only focuses on the extremes of deprivation, and does not take account of patterns of inequalities observed across the intermediate groups.

Slope index of inequality (SII): This measure describes the gradient of health observed across the deprivation scale. While the absolute gap shows the difference between two large groups, SII measures the difference in health outcomes between the theoretical most and least deprived individuals, according to linear regression across health outcomes for all deprivation deciles. SII therefore has the advantage of being sensitive to the experience of the entire population, rather just the extremes of deprivation. For example, an equal rate across all deprivation categories would give a horizontal line with a slope of zero (SII=0) indicating that there is no evidence of inequality. The level of inequality is shown by the magnitude of the gradient, regardless of direction.

The slope of index of inequality (Sii) shows that the absolute gap in the rate of autism amongst children between the most and least deprived was 1,511 cases per 100,000 population in 2019/20.



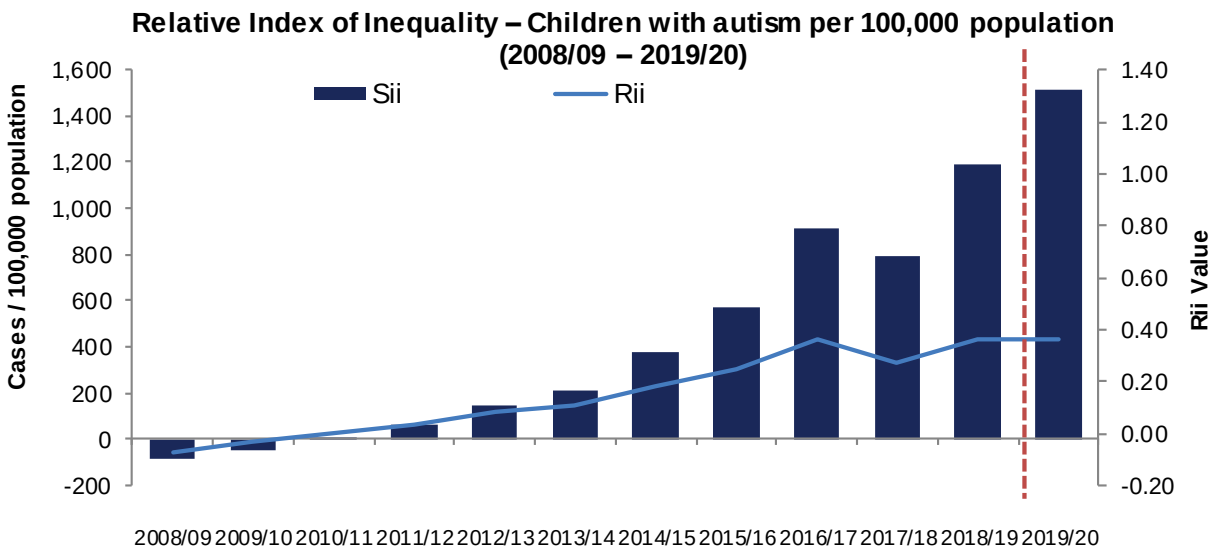
Source: Northern Ireland School Census

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools.

16 – *Fair Society, Healthy Lives: The Marmot Review* can be accessed at http://www.marmotreview.org.

Relative index of inequality (RII): The RII describes the gradient of health observed across the deprivation scale, relative to the average for the observed population (by dividing the Slope of Index of Inequality (SII) by the mean). The value of RII tells you the magnitude of inequality in relation to the mean thus representing the proportionate change in the health outcome across the population. It allows inequalities to be compared and contrasted across a number of different health indicators, and also to be monitored over time. As with SII, a value of zero for RII indicates no evidence of inequality. The higher the RII value is, the higher the level of inequalities that exist in the population.

The relative index of inequality (Rii) gives a proportionate gap of 0.41 in 2018/19 i.e. the Sii gap is equivalent to 41% of the average rate of autism amongst children in NI. As with the simple gap analysis, Rii indicates that the deprivation gap has changed from negative (higher rates in least deprived than most deprived) to positive (higher rates in most deprived than least deprived) over the analysed period. It should be noted that despite the simple gap indicating that this change in direction has only occurred in recent years, Rii shows that this change occurred much earlier and that the deprivation gap had been gradually widening since 2010/11.



Source: Northern Ireland School Census

Note: Figures for 2018/19, and 2017/18, have been amended since the previous publication.

Note: Figures relate to children in Primary 1 to Year 12 in grant-aided primary, post-primary and special schools. Please note that due to a change in the data collection, the years up to and including 2018/19 are not directly comparable with 2019/20.

Year	Simple Gap (MD-LD)	Sii	Rii
2019/20	46%	1,510.7	0.36
2018/19	42%	1,189.6	0.36
2017/18	33%	793.6	0.27
2016/17	47%	909.1	0.36
2015/16	30%	569.8	0.25
2014/15	19%	380.8	0.18
2013/14	6%	216.2	0.11
2012/13	-2%	146.1	0.08
2011/12	-6%	61.3	0.04
2010/11	-8%	1.9	0.00
2009/10	-3%	-45.2	-0.03
2008/09	-10%	-84.4	-0.07

For further information regarding the Social Gradient of Health and its methodology, please refer to the Health Inequalities Annual Report: Health inequalities statistics | Department of Health

For further information on "**The Prevalence of Autism (including Asperger's Syndrome) in School Age Children in Northern Ireland",** please contact:

Community Information Branch
Department of Health
Annexe 2, Castle Buildings
Stormont
BT4 3SQ, Belfast, Northern Ireland

or email cib@health-ni.gov.uk.